California MLPA Master Plan Science Advisory Team Draft Work Group Responses to Science Questions Posed by the NCCRSG at the November 28, 2007 NCCRSG meeting Revised February 15, 2008

The following are responses of the MLPA Master Plan Science Advisory Team (SAT) to questions posed at the November 28, 2008 meeting of the MLPA North Central Coast Regional Stakeholder Group (NCCRSG). These responses have been prepared by work groups of the SAT and MLPA staff, and were adopted by the SAT at its January 23, 2008 meeting.

1. For no disturbance zones for seabird and mammal species likely and most likely to benefit from marine protected areas (MPAs), what are the seasons that need to be incorporated to protect these species (range of time)?

This response was adopted by the SAT at its January 23, 2008 meeting.

SAT response: See attached table.

2. What area would encompass the congregation of Chinook salmon at the mouth of the Russian River, over an average of several years? [Alternatively, could you advise us about whether the areas at the Russian River mouth in two contrasting alternatives, such as Jade B and external option C, are big enough for that purpose?]

This response was adopted by the SAT at its January 23, 2008 meeting.

SAT response: See responses 8 and 8a from the October 16-17, 2007 set of science questions to the SAT.

3. Will the "hundred penny" studies be used to analyze impacts of various alternatives on commercial and/or sport fishing; if so and if those studies ask fishermen to identify the most important areas they've fished throughout their career, could we also get an overlay of the current rockfish conservation areas on the MPA proposals, to better evaluate what areas would likely have less immediate impact because they include or intersect with areas currently closed? Will analyses using fishing grounds (including the area outside state waters) be available?

This response was adopted by the SAT at its January 23, 2008 meeting.

SAT response: This question is addressed in the document *Draft MLPA Evaluation Methods for MPA Proposals* in the section describing socioeconomic evaluations.

4. If "parallel processes" models will be run to compare the different alternatives, will their assumptions and decision rules (a) be transparent to stakeholders and (b) be consistent with SAT guidelines, including levels of protection, so that the model evaluations provide information that's complementary to that provided through the primary evaluation procedures?

This response was adopted by the SAT at its January 23, 2008 meeting.

SAT response: Transparency is a key component of the MLPA Initiative process. As such, any models that may be used to complement the evaluation of MPA proposals will include a fact sheet that highlights important parameters, assumptions, and outputs. Additionally, any model used to complement the evaluation of MPA proposals will be just that, complementary information to further inform the evaluation process. The use of models in providing supplemental information is consistent with the guidelines in the MLPA and the master plan for MPAs.

California Marine Life Protection Act Initiative Seasonality of Sensitive Life Stages of Birds and Mammals Most Likely to Benefit from Marine Protected Areas Revised December 10, 2007

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds (breeding)													
cormorant, Brandt's	Phalacrocorax penicillatus												
cormorant, double- crested	Phalacrocorax auritus												
cormorant, pelagic	Phalacrocorax pelagicus												
guillemot, pigeon	Cepphus columba												
murre, common	Uria aalge												
murrelet, marbled	Brachyramphus marmoratus				Year-round in foraging areas								
Seabird (migrant)													
brant	Branta bernicla												
grebe, Western/Clark's	Aechmophorus occidentalis, clarkii												
sandpiper, western	Calidris mauri												
scaup, lesser	Aythya affinis												
scoter, surf	Melanitta perspicillata												
willet	Catoptrophorus semipalmatus												
Marine mammals													
porpoise, harbor	Phocoena phocena				Year-round								
sea lion, Steller	Eumetopias jubatus				Year-round at haulout sites								
sea otter, southern	Enhydra lutris				Year-round	Year-round in kelp beds with otters (near Half Moon Bay)							
seal, harbor	Phoca vitulina												

Buffers of 1,000 feet at rookeries, haulouts, and foraging areas are recommended during the times indicated with light grey. Protection during the times indicated in dark grey would also benefit the species.

Light grey indicate sensitive life stages, primarily breeding/nesting times for resident species and foraging times for migrant species.

Sources: Dr. Sarah Allen, Point Reyes National Seashore and Dr. Gerry McChesney, U.S. Fish & Wildlife Service

California MLPA Master Plan Science Advisory Team Responses to a Science Question Posed at the December 11-12, 2007 NCCRSG meeting Revised February 15, 2008

The following are responses of the MLPA Master Plan Science Advisory Team (SAT) to a question posed at the December 11-12, 2008 MLPA North Central Coast Regional Stakeholder Group (NCCRSG) meeting. These responses have been prepared by a work group of the SAT and MLPA staff. SAT responses were adopted by the SAT at its January 23, 2008 meeting.

1. What level of protection would a state marine conservation area (SMCA) at the southeast Farallon Islands receive if that SMCA included the use of a seasonal special closure to protect critical periods for seabirds and marine mammals while allowing uses such as commercial abalone diving during less critical times of the year, noting that the allowed uses would strictly adhere to the frameworks set forth in fishery management plans and the Abalone Recovery Management Plan (ARMP)?

Background: Members of the NCCRSG and the public are concerned that a state marine reserve (SMR) at the Farallons would negate the potential for a future commercial abalone fishery at the Farallons. Therefore, they would like to consider designing an SMCA that could incorporate other stakeholder concerns, such as protections for seabirds and marine mammals, while allowing for extractive uses that minimize habitat damage and conform to existing management plans. Note that in one of the draft marine protected area (MPA) proposals a stipulation was inserted that states if through the mechanisms provided in the ARMP a commercial abalone fishery was allowed at the Farallons any MPA would be reexamined for possible allowance of the commercial take of abalone.

This response was discussed and adopted by the SAT at its January 23, 2008 meeting.

SAT Response: The level of protection assigned to an MPA that allows commercial or recreational abalone harvest is addressed in the *DRAFT MLPA Evaluation Methods for MPA Proposals* document. An SMCA allowing commercial abalone diving at the southeast Farallon Islands would receive the same level of protection as recreational abalone fishing even if seasonal special closures were in place during critical periods for seabirds and marine mammals. Despite the use of special closures for the protection of seabirds and mammals impacts to subtidal communities would be the same as from recreational abalone harvest thus would not raise the level of protection. Commercial abalone fishing is likely to have a greater impact than that for recreational fishing, due to the use of dive gear and the lack of deep water refugia.

a) What provisions are there to ensure that the potential for a future commercial abalone fishery at the Farallones is not ruled out with the designation of an SMR?

Staff response: Any decision regarding a potential commercial abalone fishery at the Farallon Islands would be discussed as a separate fisheries management decision by the California Fish and Game Commission. If new MPAs are established at the Farallones that prohibit the take of abalone, the commission would have to weigh the options of either

changing those MPAs to allow the take of abalone, or leaving them in place. Concerns regarding potential future abalone diving locations should certainly be raised now, so that they can be considered in the final MPA siting decisions.

The California Fish and Game Commission always has the discretion to change an MPA and has done so in other cases to allow commercial fisheries. The commission recently modified the regulations at Dana Point to allow commercial take of lobster. This changed an existing state marine park into a state marine conservation area.

Another example of this type of process is found at San Miguel Island. MPAs were established at San Miguel during the abalone fishery moratorium. Those MPAs do not cover the entire historic fishing grounds and the commission is presently engaged in a process to begin consideration of a potential new abalone fishery. While the commission has not indicated whether it will change the MPAs, it has indicated a willingness to receive information on whether a new fishery is warranted. Any future consideration of commercial abalone fishing at the Farallones would follow a similar process.